

Preserving plants.—POLLACCI, speaking before the Italian Botanical Society,³² commends his method, proposed in 1900, for preserving plants in a watery solution of sulfur dioxid. Specimens so preserved in 1900 have retained perfectly their form and are in as good condition for sectioning as when fresh. He has improved the method of making the solution and has devised a means of retaining perfectly the green color. To make the solution, place sodium bisulfid in a large flask, add sulfuric acid drop by drop, and conduct the gaseous SO₂ through water, which quickly becomes saturated and may be preserved for use as needed. To retain green color immerse the material in a 1 per cent. watery solution of copper sulfate, leaving it 24 to 48 hours according to the consistence of the tissues; then transfer to the preservative solution.—C. R. B.

Teratology in Salix.³³—MOTT records various cases of teratology in the flowers of two Californian willows, *S. lasiandra* Benth. and a hybrid of *S. lasiandra* Benth. and *S. babylonica* L. In making the statement that no mention has been made for Salix of an intimate association of microsporangial and megasporangial tissue he overlooks an earlier account by the reviewer,³⁴ who described and figured equally intimate associations. According to MOTT, the abnormalities indicate that the ancestral Salix flower consisted of a pistil and two stamens with a four-parted perianth, the present unisexual condition having been reached by the suppression of the organs of one sex. Hybridization seems to offer the most likely explanation of the abnormalities.—CHARLES J. CHAMBERLAIN.

Nectaries of Cruciferae.—VILLANI has made an exhaustive comparative study of the nectaries of Cruciferae³⁵ and concludes that on the basis of their number the Cruciferae can be divided into four types, and on the basis of their position into generic groups. The diverse forms as to nectaries are referable to one primitive type, having four nectaries, two of which are at the base and external to each stamen, constituting an external dimerous cycle, and two at the base and between each member of each pair of long stamens, constituting an internal dimerous cycle. The tetramery of the corolla is only apparent, the whole flower being purely dimerous. The nectaries function both for securing cross pollination and protection.—C. R. B.

Morphology of Chloranthus.—Miss HELEN M. ARMOUR³⁶ has published the results of her study of Chloranthus, especially interesting as extending our

³² POLLACCI, G., Nuovo metodo per la conservazione di organi vegetali. Bull. Soc. Bot. Ital. 1905:242.

³³ MOTT, WILLIAM WARNER, Teratology in the flowers of two Californian willows. Univ. Cal. Publ. Bot. 2:181-226. pls. 19-20. 1905.

³⁴ BOT. GAZ. 23:147-179. pls. 12-17. 1897.

³⁵ VILLANI, A., Dei nettarii delle Crocifere e del loro valore morfologico nella simmetria florale. Malpighia 19:399-439. 1906.

³⁶ ARMOUR, HELEN M., On the morphology of Chloranthus. New Phytol. 5:49-55. pls. 3-4. 1906.